## Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application.

## **Listing of Claims:**

1. (Currently Amended) A radio base station for performing a radio communication with a plurality of mobile stations, each of which has a plurality of antennas, the radio base station being configured for characterized by:

a capacity to establish establishing a radio connection with each of the plurality of mobile stations, optionally using a space division multiplex method; and

when communicating with only one mobile station using time-division time slots,
allowing the mobile stations to keep the diversity reception, and when starting communicating
with the second or further mobile station using the space division multiplex method, transmitting
a diversity reception stop instruction to the one mobile station already connected

when the radio base station and the plurality of mobile stations have established radio connection using the space division multiplex method, and the radio base station starts a communication with one of the plurality of mobile stations using the space division multiplex method, transmitting to the mobile station an instruction to stop performing a diversity reception that uses a plurality of antennas, and to start performing a reception that uses a single antenna.

2. (Original) The radio base station of Claim 1 comprising:

a creation means for creating a piece of traffic channel assignment information after receiving a traffic channel assignment request from a mobile station;

an attachment means for attaching the diversity reception stop instruction to the piece of traffic channel assignment information; and

a transmission means for transmitting the piece of traffic channel assignment information with the diversity reception stop instruction, to the mobile station as a response to the traffic channel assignment request.

## 3. (Original) The radio base station of Claim 1 comprising:

a determination means for determining, after receiving a traffic channel assignment request from a mobile station, whether to allow the mobile station to space-division-multiplex with another mobile station which has communicated with the radio base station;

a creation means for creating a piece of traffic channel assignment information when the determination means determines to allow the mobile station to space-division-multiplex with the other mobile station;

an attachment means for attaching the diversity reception stop instruction to the piece of traffic channel assignment information; and

a transmission means for transmitting the piece of traffic channel assignment information with the diversity reception stop instruction, to the mobile station as a response to the traffic channel assignment request, and transmitting the diversity reception stop instruction to the other mobile station through a traffic channel.

## 4-6. (Cancelled)